Smith Mountain Lake Association - Water Conservation Alliance

The Smith Mountain Lake Association formed the Alliance over a year ago. It consists of upstream, Smith Mountain/Leesville Lakes, and downstream stakeholders. Alliance members agreed that the goal was to search for a consensus on ways to influence the management of the water levels and water quality throughout the Roanoke River Basin. The Alliance was to accomplish this goal by collecting and assessing historic water flow data, then charting the data looking for statistically significant monthly trends. Alliance members would then construct a computer model of water flow at Smith Mountain Lake. Armed with this data, they would then form a consensus and recommend water flow strategies to AEP, DEQ, DGIF, FERC and other relevant decision makers.
In the past year Alliance members and committees submitted the following papers, which are available upon request from the Lake Association office at (540) 297-4146:

MATCHING FLOWS
John Lindsey
March 25, 2002
A paper arguing that output should equal input when the Lake inflows drop below 650 cfs; however, releases should be maintained at 350/400 cfs with inflows less than 350/400 cfs input.

A NEW FLOW REGIME
Shelton Miles
April 29, 2002
A paper arguing that graduated releases are called for based on a formula matching Lake levels, water input and time of the year.

PAPER COMMONALITIES
Ralph Brush
June 10, 2002
A paper showing the similarities of the trigger points of the two flow papers submitted in March & April.

INFLOW REPORT
Dave Banta
July 30, 2002
A paper showing the need for more sophisticated measuring devices on water inflow.

WITHDRAWAL REPORT
John Lindsey & Bill Reidenbach
July 30, 2002
Identified withdrawals, including evaporation (up to 200 cfs on a sunny summer day), and 6 cfs from the new Bedford County project.

WATER MANAGEMENT PRIORITIES
Ken Cabarle, Cole Poindexter and Bill Brush
Jan 28, 2003
This paper lists the top priorities the Alliance must take into account when developing a new flow protocol during times of low flow input. Not everyone agreed with the ranking; however, Alliance members did agree that the nine issues were the most important. Here's a summary of their findings:

There were four scoring categories for the Water Management Priorities Committee:

Priority of importance based on personal values
Potential impact/risk of not acting on an objective
Immediacy of action required and time related importance
The probability of impact

Management Priorities named were:

Protect Water Quality in the Lakes and rivers and protect the aquatic habitat - - -
We should work to maintain the quality of water that we currently have, to protect the areas of exceptional water quality (e.g., wetlands) and make a concerted effort to clean up the waters that are deemed impaired by State and Federal standards.

Sustain the Public Water Supply - - -
Work to ensure a clean, stable supply of drinking water for all users within the confines of the Basin.
Manage Lake levels to balance the needs of all stakeholders in the Basin - -
Actively manage Lake levels to balance the needs of recreational users throughout the Basin while taking into consideration all other management objectives.

Support and Enhance fisheries management in the Basin - - -
Provide for optimum fishery with a special emphasis on striped bass spawning.
Monitor and inform stakeholders of new on- and off-stream water uses to ensure proper conservation and preservation consistent with other management objectives.

Meet the needs of previously existing Riparian users within the confines of existing water laws and regulations - - -
Flows shall not be stopped so as to deny riparian users of Basin rivers and Lakes access to their waters.
Mitigate the impact of future development upon flooding

Provide for Pump Storage Electrical Power Generation - - -
Understandably, this is the top priority to AEP; however, it is not actionable by Alliance members.
Providing for new and nonessential off-stream users (development).

Along this thirteen-month path of meetings, papers and deliberations, and presentations by Senator Hawkins and Congressman Goode, something very interesting happened: Lake residents learned more about the annual water needs of downstream stakeholders and vice versa.

Our efforts also are being rewarded by Congressman Goode's efforts to champion an in-stream flow study in the entire basin.

Alliance members recently agreed to proceed with a new working committee,

involving AEP, SML and downstream stakeholders, to form a consensus on water flow protocol. If successful, the Alliance would present this recommendation through AEP to DEQ and FERC. It would also become an integral part of AEP's relicensing plan.